

Claim Rejections - 35 USC § 103

On pages 2-3, in numbered paragraph 2, of the Official Action, the Examiner rejects claims 1-14 under 35 USC 103(a) as being unpatentable over Kalley et al. (U.S. Patent 5,959,306)/Kalley (U.S. Patent 5,674,000) in view of German Patent Application DE 199 38 480 A1, Della Ciana et al. (U.S. Patent 6,136,612) and Pinkus et al. (U.S. Patent 5,608,213). In this rejection, it is the position of the Examiner that the claims are obvious over the combination of the teachings of the cited references. This rejection is respectfully traversed.

A. Case law provides that when prior art references require a selective combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself. Something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. It is impermissible to use the claims as a frame and the prior art references as a mosaic to piece together a facsimile of the claimed invention. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044; 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

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It is respectfully submitted that there is no teaching, suggestion or incentive in any of the cited references or knowledge generally available to one of ordinary skill in the art of fluorescent leak detection that would lead one to combine the teachings of the Kalley patents with those of German Patent Application DE 199 38 480 A1, Della Ciana et al. and Pinkus et al. Thus, it is respectfully submitted that the Examiner has impermissibly used claims 1-14 of the present application as a frame and the Kalley patents, German Patent Application, Della Ciana et al. and Pinkus et al. references as a mosaic to piece together a facsimile of the claimed invention.

B. Furthermore, even combining the teachings of the cited references would not result in the disclosure of the present invention. Page 7, lines 5-8, of the present specification states:

Consequently, the lamp operates with low power drain, at reduced temperatures and has an extremely long life expectancy as compared to conventional detection lamps equipped with incandescent bulbs.

1. Simply replacing an incandescent bulb from the Kalley patents (U.S. Patents 5,959,306 and 5,674,000) with an LED would not work. An LED typically has very low

output lumens and would not be adequate to fluoresce the dyes escaping from leak sites.

2. However, an unexpected clarity or boost in fluorescent dye detection is obtained with the present invention because there is a larger spread in wavelengths between the light output from the detection lamp and the emission wavelength from the fluorescent dye.

3. In addition, a typical bulb, as presented in the Kalley patents (U.S. Patents 5,959,306 and 5,674,000), operates at very high current and is very susceptible to damage being a regular incandescent bulb. A further advantage of the present invention is that the durability of LEDs are particularly rugged when used in the typical environment of an automotive repair facility. The LED should never need to be replaced over the life of the product.

4. Finally, detecting leaks using UV dyes with UV LEDs requires the LED to be very close to the leak site, i.e., within a few inches of the leak site to adequately fluoresce the dye escaping from the leak. At this close range, the area illuminated by the LED is small, requiring

more careful scanning of components and lines to detect any leaks, in contrast to conventional detecting lamps.

In order to intensify the LEDs output and provide a more focused beam, a magnifying lens can be placed in front of the LED. This modification improves leak fluorescence and provides a greater effective working distance than using an LED alone. The lens can be plano convex, biconvex or aspheric in design and can be made from any UV optically transparent material such as glass or plastic. The use of a lens is not limited to UV LEDs, as it will improve the performance of any color LED. The positioning of the lens can also be changed to alter the beam from narrow to wide.

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In view of the above-given explanation, it is respectfully submitted that claims 1-14 are not obvious over the combination of the teachings of the cited references. It is, therefore, respectfully submitted that this rejection be withdrawn and that claims 1-14 be allowed.

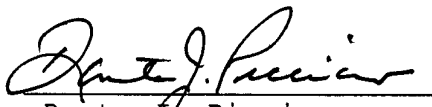
The sole rejection having been addressed, it is respectfully submitted that the present application is condition for allowance and a Notice to that effect is earnestly solicited.

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Should any matters remain in this application which might be resolved by interview, the Examiners is requested to telephone the undersigned at 570-386-5744.

Respectfully submitted,

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